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What is claimed is;

1. A method of treating perfluorocompound (PFC) gas comprising the steps of:
5 decomposing the PFC,
washing the gas generated by the decomposition of
PFC, and
exhausting the washed gas, wherein
said step of exhausting the washed gas is performed
10 after removing mist from said washed gas.
2. A method of treating perfluorocompound (PFC) gas comprising the steps of:
15 decomposing the PFC,
washing the gas generated by the decomposition of
PFC, and
exhausting the washed gas, wherein
said step of exhausting the washed gas is performed
after removing mist containing PFC decomposition product
20 from said washed gas.
3. A method of treating perfluorocompound (PFC) gas comprising the steps of:
25 decomposing the PFC by any one of method selected
from the group consisting of hydrolysis, oxidation
decomposition, combustion, and thermal decomposition, and
washing the gas generated by said decomposition of
PFC by making said gas contact with at least either one

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of water or an aqueous alkaline solution, further comprises:

a step of removing mist containing PFC decomposition product from said washed gas.

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4. A method of treating perfluorocompound (PFC) gas comprising the steps of:

decomposing the PFC by diluting said PFC with nitrogen, and contacting the diluted gas with a decomposition catalyst in the presence of air and water, and

washing the gas generated by said decomposition of PFC by making said gas contact with at least either one of water or an aqueous alkaline solution, further comprises:

a step of removing mist containing PFC decomposition product from said washed gas.

5. An apparatus for treating perfluorocompound (PFC) gas comprising:

a gas washing tower, wherein at least one of water or an aqueous alkaline solution is sprayed to PFC decomposed gas, and

an exhaust blower for exhausting the gas washed at said gas washing tower, further comprises:

a mist separating apparatus which separates mist from said gas washed at said washing tower.

6. An apparatus for treating perfluorocompound (PFC) comprising:

a decomposition apparatus for decomposing PFC to a gas containing hydrogen fluoride, and

5 a decomposed gas washing apparatus for making the gas generated by said decomposition apparatus contact with at least one of water or an aqueous alkaline solution, further comprises:

10 a mist removal apparatus for separating mist, which contains PFC decomposition products, from said gas which is washed at said decomposed gas washing apparatus.

7. An apparatus for treating perfluorocompound (PFC) gas comprising:

15 a decomposition tower for decomposing PFC by any one of method selected from the group consisting of hydrolysis, oxidation decomposition, combustion, and thermal decomposition,

20 a gas washing tower for contacting the gas generated by said decomposition of PFC with at least either one of water or an aqueous alkaline solution, and

a blower for exhausting the gas washed at said gas washing tower toward outside of the tower, further comprises:

25 a mist removal apparatus for separating mist, which contains PFC decomposition products, from said washed gas located at a portion before the gas washed at said gas washing tower reaches said blower.

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8. An apparatus for treating perfluorocompound (PFC) gas comprising:

a catalyst reaction tower packed with PFC

5 decomposition catalyst, wherein a hydrolysis reaction of PFC is generated by introducing gas containing PFC, which is diluted with nitrogen, and water and air, therein,
10 a gas washing tower for contacting the gas, which is generated by said decomposition of PFC at said catalyst reaction tower, with at least either one of water or an aqueous alkaline solution, and

an exhaust blower for exhausting the gas, which is washed at said gas washing tower, toward outside of the tower, further comprises:

15 a mist separating apparatus for separating mist, which contains PFC decomposition products, from said washed gas at a location in the upper stage than said exhaust blower.

20 9. An apparatus for treating perfluorocompound (PFC) gas as claimed in claim 5, wherein

said mist separating apparatus is a cyclone type mist separating apparatus, which is composed so that the mist contained in the gas is separated by a centrifugal force.

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10. An apparatus for treating perfluorocompound (PFC) gas as claimed in claim 5, wherein

said mist separating apparatus is a filter type mist

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separating apparatus, which is composed so that the mist contained in the gas is separated by a set of filters, the set of filters is composed by overlapping plural filters which have different pore sizes each other.

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